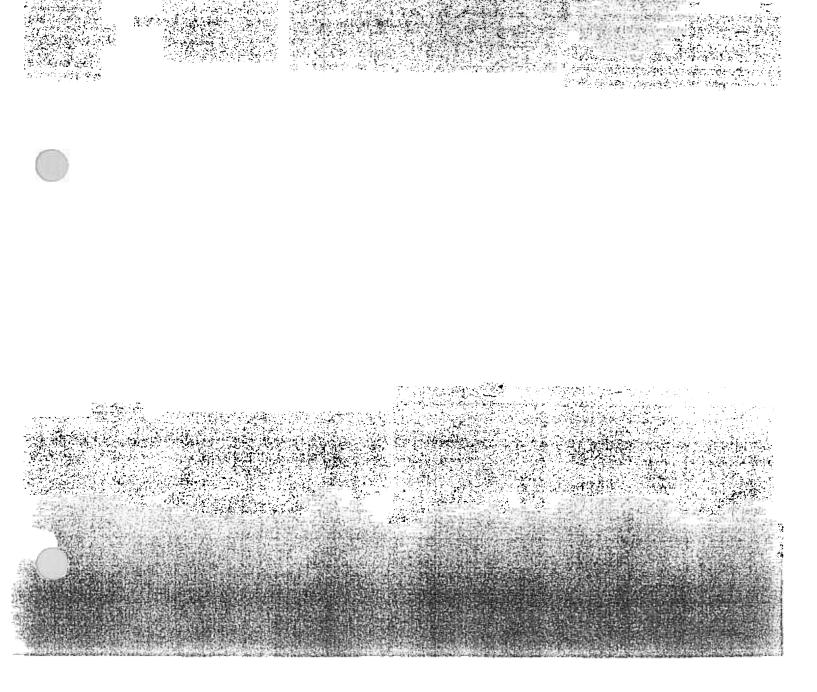
APPENDIX F

June 4, 2003 NOAA Comments





UNITED STATES DEPARTMENT OF COMMERCE National Gosenic and Atmospheric Administration NATIONAL MARINE FISHERES SERVICE 1315 Esse-West Highway Silver Spring, Meryard 20910

THE DIRECTOR

JUN - 4 2003

MEMORANDUM FOR: Brandon Blum

Office of General Counsel for Ocean Services

FROM:

A. Cul-La William T. Hogarth, Ph.D.

SUBJECT:

Islander East Pipeline Company Consistency Appeal

I am responding to the memorandum from the former Deputy Under Secretary for Oceans and Atmosphere, Mr. Scott Gudes, regarding a Department of Commerce administrative appeal by the Islander East Pipeline Company (Islander East or appellant) pursuant to the Coastal Zone Management Act (CZMA). The appeal petitions the Secretary for an override of the State of Connecticut's objection to Islander East's proposed natural gas pipeline. The pipeline would extend from a connection with an existing natural gas infrastructure near North Haven, Connecticut across and beneath the waters of Long Island Sound (the Sound) connecting to an inland terminus at Brookhaven, Long Island, New York. The State of Connecticut has determined that the proposed action would adversely impact natural resources, land and water uses in their coastal zone beyond acceptable levels. In his January 31, 2003 memo, Mr. Gudes asked NOAA's National Marine Fisheries Service (NOAA Fisheries) to provide comments on the Islander Fast appeal. We are responding to those substantive grounds as they relate to our mandate to protect, manage, and restore the nation's fishery resources. We are unable to provide comments on the procedural grounds of timing of communications or national security interest.

Based on our understanding of the proposed action and the specifications contained within Mr. Gudes' nemo, the State of Connecticut decision raises important concerns with respect to the environmental impact of the proposal. Portions of the pipeline route transit ecologically sensitive areas of importance to the state and nation, and there is a likelihood of incurring significant adverse environmental impacts during pipeline installation. There are reasonable alternative alignments, and we have identified less destructive installation methodologies and procedures, both of which would significantly lessen adverse impacts on natural resource, while advancing the appellant's objectives.

NOAA Fisherics' Comments on the Issues being Considered in the Appeal

For the Secretary to find for the appellant, he must determine that the project satisfies two substantive grounds. The first is that the project is "consistent with the objectives" of the CZMA. This ground is subdivided into three interrelated items. The Secretary must find that the pipeline 1) furthers the national interest as articulated in sections 302 or 303 of the CZMA in a

THE ASSISTANT ADMINISTRATION FOR PISHENES





significant or substantial manner; 2) outweighs the national interest associated with the activity's adverse coastal effects, when those effects are considered separately or cumulatively; and 3) has no reasonable alternatives that could be conducted in a manner consistent with the enforceable policies of the State of Connecticut's Coastal Zone Management Program.

The second substantive ground for overriding a state's objection is whether the proposed activity is necessary in the interest of national security. The Secretary must find that a national defense or other national security interest would be significantly impaired if the activity in question was not permitted to go forward as proposed.

Islander East Company proposes a pipeline project in the shoal waters of Connecticut to dredge a trench and to store the removed sediment "in-water," immediately adjacent to the excavation. Within that 1.8 km (1.1 mile) long trench area and adjacent seafloor, as well as offshore to the 15 meter isobath, immediate and protracted destabilization of the seafloor will be incurred. The project construction footprint encompasses an area of 1,270 hectares (5 square miles). The sediments in the project area are mostly composed of fine particles that are tightly consolidated in an undisturbed state. When disturbed, however, as through drodging, they become very loosely consolidated and easily resuspended into the water column (Tavolaro, 1984). Wave energy is strong enough to disperse these destabilized, excavated sediments, and may result in continued impacts on nearby sea floor habitats. The physical displacement of the existing habitat and hydration of the sediment will diminish or exclude resource use for relatively long periods of time. Evidence of this from the Hudson River collected from benthic profiling performed by LaMont-Doberty Geological Observatory for the State of New York (New York State Department of Environmental Conservation 2003) indicates that other utility crossings, undertaken in the Hudson even decades ago, continue to have discernible adverse impacts on the aquatic resources in the project alignments. As a specific example, benthic profiling of a water line installation hetween Newburgh and Wappinger in 1974 indicates that the site has not fully recovered to preconstruction conditions. Thus, sediment dispersal and acute adverse habitat degradation from the Islander East proposed construction will affect habitat function for long periods. FERC's Islander East Pipeline Project FEIS (2002) states on page 5-5 that, "Based on a review of sea floor recovery rates and analysis of existing conditions, most disturbed benthic communities would be expected to recover within 5 years." However, the document further states, "...disruption of nearshore Connecticut shellfish habitat and deep anchor pits or depressions created by construction could take longer to recover and in some cases may develop different benthic communities." This indicates that shellfish habitat may take much longer than five years to recover and may never fully recover to pre-existing use condition for these resources. Moreover, hydrated sediment is too fluid to support the weight of adult clams, the size and weight of which is dependent on the consistency of the sediment. As settled clams grow and gain weight, they may sink deep enough into these sediments and smother as oxygen depletes (Wilber and Clarke 2001). The nature and persistence of these physical impacts were deemed by the state to be inconsistent with 14 enforceable policies of the Connecticut CZMP (Connecticut DEP letter to Islander East Co., 2002).

As presently proposed, the 1,270 hectares of pipe laying and multiple pass, plowing, and backfill programs would physically and adversely impact the Long Island Sound seabed, and would disperse significant volumes of resuspended sediment onto nearby spawning, nursery, and maturation habitats for finfish, mollusks, and crustaceans. Suspended sediments have been shown to degrade habitat functions and values and exclude motile species (Wilbur and Clarke 2001; Limburg et. al. 1999; Benfield and Mincilo 1996; Johnson and Wildish 1982). Connecticut DEP has concluded that those actions would be inconsistent with ten enforceable policies of their CZMP (Connecticut DEP letter to Islander East Co., 2002). These impacts also have national interest implications regarding fishery resources which are managed by NOAA Fisheries, either solely or jointly with the State of Connecticut. Although the State of Connecticut's consistency determination focused on lobsters and quabogs, the New England Fishery Management Council and the Mid Atlantic Fishery Management Council did designate the project area as essential fish habitat for as many as 23 aquatic species managed under the Magnuson-Stevens Fishery Conservation and Management Act. This is an important consideration for NOAA Fisheries as the project could affect habitats used by these species.

NOAA Fisheries' communications to FERC and the Army Corps of Engineers (ACOE) present similar arguments regarding the proposed pipeline. Discussions among the appellant and the regulatory agencies indicated significant, unacceptable, and avoidable individual and cumulative adverse impacts associated with the project. NOAA Fisheries has expressed these conclusions and their justification to both FERC on May 20, 2002, during their National Environmental Policy Act review process (FERC/EIS - 0143F), and to the ACOE, New England District, on July 3, 2002 in response to their public notice for this project. Those impacts were characterized as two principal types—removal or burial of both resource and habitat within the actual construction corridor, and intensified suspended sediment-induced impacts in the far-field. Both impact types have been shown to be associated with the pipe installation methodologies proposed by Islander East and are destructive to habitats and resources of concern to NOAA Fisheries.

Many of the adverse impacts associated with the proposed pipeline relate to the installation techniques proposed by the appellant. As noted above, NOAA Fisheries has identified that the impact area contains both species and habitats managed under the Magnuson-Stevens Fishery Conservation and Management Act as well as the Fish and Wildlife Coordination Act, and that those resources would be adversely impacted by the pipeline installation. The present design calls for the creation of open trenches and pits with adjacent, in-water storage of the excavated material and subtidal discharge of drilling mud and its contents in water depths where simple pipe laying and burial procedures cannot be employed (waters < 7 meters). In waters deeper than 7 meters, the project calls for a total of four passes of the installation and burial equipment along the remainder of the approximately 32-kilometer underwater section between Branford, CT and Wading River, NY. Both the inshore and offshore activities will result in seabed disruptions that have been characterized by the appellant as adversely impacting approximately 1,274 hectares.

Additional impacts are created by the proposed lay barge mooring and positioning system which will require approximately 70 anchor placements per kilometer. These habitat displacements and

dispersion of sediment created by the anchoring procedures are seen as pits and fluidized sediments. Habitat found in waters deeper than 15 meters are more stable (i.e., less influenced by natural distarbance events) than those in shallower waters. Because of that stability, disturbance in deeper waters usually result in protracted damage to such habitat, perhaps much longer than five years (SAIC 1995). Pits created by anchor placements, particularly of the size used for pipe laying, can eapture organic materials and semi-motile species creating hypoxic or anoxic traps incapable of supporting benthic organisms. (Bohlen, Cohen and Strobel 1992). Hydrated sediments are incapable of providing support for molluscan organisms that can grow as heavy as northern quahog or surf clams. Eventually, these molluses sink in the unstable sediment, and without contact with the overlying oxygenated waters, they suffocate (Hirsch, Disalvo and Peddicord 1978). Because much of the central Sound floor is composed of fine grained materials, sediment reconsolidation will be protracted. Near bottom turbidity in such depths diminishes efficient feeding by aquatic resources and may inhibit both spawning and hatching success by exhausting resources needed for gonadal development and by suffocating released gametes (Wilbur and Clarke 2001).

In determining whether the national interest of the proposed pipeline outweighs the adverse coastal effects, either separately or cumulatively, we note that there are several other natural gas pipeline and energy transmission interconnection proposals seeking access to the same market. Other proposals, such as the Iroquois Eastern Long Island Extension Project, as mentioned in the Islander East FEIS, have significantly sewer and smaller individual and cumulative impacts associated with their design than those found in the Islander East proposal. Further, the State of Connecticut has authorized the placement of utility structures in their coastal zone, indicating that some proposals can comply with the Connecticut Coastal Zone Policies. FERC identified and discussed a number of alignment and system alternates in their final environmental impact statement (FERC/EIS-0143F 2002), and concluded on page 4-3 that an Eastern Long Island (ELI) system alternative is more environmentally benign than the appellant's. NOAA Fisheries has recommended that the appellant employ such alternative alignments and identified less destructive installation methodologies that would reduce further local and regional adverse impacts. Selection of an alignment with fewer shellfish resources, elimination of the trenching, and reduction in the number of plow and backfill passes are alternatives that would greatly reduce the adverse impacts associated with the Islander East proposal.

Finally, we note that Islander East and the principal regulatory agencies (State of Connecticut and federal) are involved in technical discussions, concurrent with this appeal process, regarding designs and practices that could greatly reduce the adverse impacts associated with the present proposal. The Coastal Zone Management Act, Federal Consistency Regulations (15 C.F.R. Part 930) Sections 930.129(b), (c) and (d) provide for those discussions.

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APPENDIX G

May 27, 2003 Letter From Islander East



May 27, 2003

RECEIVED

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DEP OFFICE OF LONG ISLAND SOUND PROGRAMS

Mr. Charles H. Evans
Director
Office of Long Island Sound Programs
State of Connecticut
Department of Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

Re:

Islander East Pipeline Project - Water Quality Certificate App. #200300937

Dear Mr. Evans:

We are in receipt of your letter dated May 5, 2003. Your letter comments on the completeness of the application filed by Islander East Pipeline Company, LLC ("Islander East") for a water quality certification pursuant to section 401 of the Federal Water Pollution Control Act ("Water Quality Certification"). It also addresses Islander East's request for a determination that the Islander East pipeline project is consistent with Connecticut's coastal zone management plans ("CZM Determination") and Islander East's pending application for a Tidal Wetlands and Structures & Dredging Permit ("TWSD Permit"). You refer to these three matters as if they were part of a single process. The three applications, however, represent three legally distinct matters and, in Islander East's view, cannot appropriately be treated on a consolidated basis for all purposes. Islander East's response to your letter with respect to each of the three matters is set forth herein.

CZM Determination: As you are aware, the CZM Determination is currently the subject of a proceeding pending before the U.S. Secretary of Commerce ("Secretary"). On May 15, 2003, Islander East filed with the Secretary a request that the proceeding be remanded to the Connecticut Department of Environmental Protection ("DEP") for a period to end no later than July 31, 2003. The request for remand is predicated on the fact that Islander East has proposed additional mitigation measures and provided supplemental data which Islander East believes should be considered by the DEP and made a part of the decisional record. The request for remand is intended to facilitate the resolution of outstanding issues with the DEP, so that the Secretary is not burdened with the appeal. By letter dated May 23, 2003, the DEP notified NOAA that it did not object to Islander East's request. On remand, further processing of Islander East's application by DEP will be governed by applicable federal law and the federal regulations set forth at 15 C.F.R §930.129 which require, inter alia, that the Secretary, in remanding an appeal, shall "determine a time period for the remand to the State not to exceed three months." Islander East urges the DEP to issue a coastal zone

Mr. Charles H. Evans May 27, 2003 Page 2

consistency determination within the time period established by the Secretary in the remand order.

Islander East is aware that the Connecticut Legislature has pending before it a proposal to extend beyond June 3, 2003 the current moratorium ("Moratorium") on issuance of permits for construction in Long Island Sound. Even if the Moratorium is extended, it is Islander East's view that the DEP must still act on Islander East's application within the period established by the Secretary, because such action is required by the federal law from which the DEP's authority to act is derived, and no state moratorium can vary that federal requirement.

Water Quality Certification At the outset, we would remind you that Islander East's Section 401 application has been pending with the DEP since February 13, 2002, well over a year. On March 13, 2003, after consultation with the DEP Staff, Islander East refiled its Section 401 application in order to accommodate DEP's request for additional time to consider modified offshore construction techniques developed after detailed discussions with DEP Staff. Your May 5 letter now seeks to continue the process of requiring new information and new proposals from Islander East, in complete disregard of the processes which have been under way at the DEP for well over a year and contrary to the understanding which led to the refiling on March 13, 2003.

Your May 5 letter treats the Section 401 Water Quality Certification as if it is a siting process, which it clearly is not. Indeed, your statement that Islander East must, as part of that process, "fully evaluate alternatives and provide a compelling demonstration that there are no feasible alignments that could further minimize adverse impacts" because "the Department can only authorize that alternative with the least impact" is completely at odds with the law.

The Clean Water Act "establishes distinct roles for the Federal and State Governments." "Although § 401(d) authorizes the State to place restrictions on the activity as a whole, that authority is not unbounded. The State can only ensure that the project complies with 'any applicable effluent limitations and other limitations, under [33 U.S.C. §§ 1311, 1312]' or certain other provisions of the Act, 'and with any other appropriate requirement of State law.'" Thus, the purpose of the Water Quality Certification is to permit the State, acting reasonably, to determine whether a

PUD No. 1 of Jefferson County v. Washington Dep't of Ecology, 511 U.S. 700, 704 (1994).

² Id. at 712 (citing 33 U.S.C. § 1341(d)). See Summit Hydropower v. Comm'r of Envtl. Prot., et al., 7 Conn. 95 (Conn. Super. Ct. 1992), rev'd on other grounds, 226 Conn. 792, 629 A.2d 367 (1993). In PUD No. 1, the Court acknowledged that § 401(d)'s reference to other "appropriate requirement of State law" would cover a state's imposition of limitations to ensure compliance with state water quality standards, but refused to speculate "on what additional state laws, if any, might be incorporated by this language." PUD No. 1, 511 U.S. at 713.

Mr. Charles H. Evans May 27, 2003 Page 3

"discharge" resulting from a federally licensed activity complies with State water quality standards.

Here, the "discharge" to be evaluated by the state is the discharge that will result from the construction and operation of the Islander East pipeline as authorized by FERC, utilizing the route certificated by FERC. The federal delegation of authority under the Clean Water Act does not include any authorization to conduct a project alternative analysis. Further, while the state is authorized to condition a certification upon the applicant's compliance with an "appropriate requirement of State law," requiring the use of a different route than that certified by FERC could not possibly be an "appropriate" State requirement. The FERC has exclusive jurisdiction over these matters to the exclusion of the states. The State's desire to evaluate alternatives to the Islander East pipeline project which would materially deviate from the FERC-certificated route clearly exceeds the authority available to it under Section 401. In short, the Section 401 process is not a forum for the state to revisit the "extensive analysis of the project as required by the [NGA] and other statutes" that was conducted by FERC. As explained in the FERC Letter, FERC's analysis of the Islander East project:

included an exhaustive study of the project's environmental impacts as required by the National Environmental Policy Act and other environmental statutes; this analysis focused in particular on the impact the proposed project will have on Long Island Sound . . . this analysis, which was subject to review and comment by local, state and federal agencies, the public and other entities, concluded that the project would have acceptable environmental impacts, including the crossing in Long Island Sound.

[t]he environmental impacts associated with the Sound water crossing have been fully and carefully reviewed by the Commission in a public process and have been found to be acceptable. While we are mindful that the development and construction of pipeline facilities present significant environmental challenges, the Commission must balance these considerations with its overriding responsibility under the NGA to ensure the timely development of an adequate, reliable energy infrastructure.

The project will contribute to Long Island's energy security, a particularly vital national consideration at the present time. The Islander East Project will also increase the diversity of available pipeline transportation options and access to supply sources and

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³ Schneidewind v. ANR Pipeline Co., 485 U.S. 293 (1988); National Fuel Gas Supply Corp. v. Pub. Serv. Comm'n., 894 F.2d 571 (2nd Cir. 1990), cert. denied, 110 S. Ct. 3240 (1990).

⁴ Letter from Pat Wood, III, Chairman of the FERC, to Mr. Scott Gudes, Deputy Under Secretary for Oceans and Atmosphere, United States Department of Commerce, March 11, 2003 ("FERC Letter").

introduce pipeline-to-pipeline competition into eastern Long Island for the first time. Moreover, the pipeline will increase overall regional infrastructure reliability and offer an additional source of outage protection to an area which is currently served mainly by one source of supply.⁵

FERC analyzed, and rejected, the alternatives on which the DEP now seeks to focus. FERC explained that:

In certificate proceedings, the Commission's primary responsibility under the NGA is to determine if the proposed facilities are required by the public convenience and necessity. The term public convenience and necessity connotes a flexible balancing process, in the course of which all the factors are weighed prior to final determination. The Commission's obligation is to weigh all relevant factors in exercising its responsibilities under the NGA. A flat rule making one factor dispositive in the certificate decision is contrary to the Commission's responsibility to consider and balance all relevant factors. Thus, although the final EIS finds, solely from an environmental standpoint, that the ELI System Alternative is the preferred environmental alternative to Islander East's proposal, that factor is not the end of our inquiry into the public convenience and necessity.

The proposed Islander East and Algonquin Projects increase the flexibility and reliability of the interstate pipeline grid by offering greater access to gas supply sources with increased availability of gas for anticipated electric generation projects. Further, it will introduce pipeline-to-pipeline competition to Eastern Long Island markets. In approving the proposed pipeline, the Commission also reviewed the precedent agreements filed by Islander East and various market studies to determine that there was sufficient long and short-term market demand to support the proposed project. Additionally, the Commission determined that the proposed Islander East Project is consistent with the Policy Statement's criteria.

The Commission also reviewed the filings made by Islander East's proposed customers and the New York PSC emphasizing the need for a totally separate sound crossing to provide contingency protection for both gas and electric systems against a total loss of supply if damage were to occur to the Iroquois line.

Accordingly, after taking the hard look required by NEPA, the Commission concluded, under the NGA, that the other values of the proposed project outweighed what the final EIS described as the project's limited, but acceptable, environmental costs. As such, it determined that, under the NGA, it was required by the public convenience and necessity to approve the Islander East Project.⁶

Thus, the FERC has already conducted the analysis that the State seeks to conduct under the auspices of Section 401. A further, duplicative review by the State is both outside the State's authority under Section 401 and is clearly preempted by the NGA.7 Moreover, FERC notified the DEP and twelve of its administrative subdivisions, including the Office of Long Island Sound Programs, of the preparation of the DEIS and the FEIS for this project, and invited them to comment on those documents and to intervene in the underlying FERC certificate proceeding.8 The DEIS and FEIS specifically addressed the issues of alternative projects and alignments, and, as part of its certificate order, FERC reviewed and considered all alternative projects and alignments presented to it and approved the current pipeline alignment for the project. The DEP did not timely intervene, and FERC denied the DEP's request for late intervention on a petition for rehearing. FERC approval and denial of rehearing on these issues, as well as others that could or should have been raised before FERC is

⁶ Islander East Pipeline Co., et al., 102 FERC ¶61,054 (2003) at ¶5.

⁷ See Niagara Mohawk Power Corp. v. N.Y. Dep't of Envtl. Conservation, 592 N.Y.S.2d 141 (App. Div.) (allowing state laws to be conditioned on compliance with other 'appropriate" state laws begs the question as to which laws are "appropriate"; here the agency seeks to consider provisions of state law that address the very matters reserved by the Federal Power Act for determination at the federal level, e.g., dam safety, general balancing of economic and other concerns), aff'd, 624 N.E.2d 146, 147, 150 (N.Y. 1993) (New York Department of Environmental Conservation's effort to broaden the scope of its review under the Clean Water Act to include aspects of ECL article 15 is unfounded), cert. denied, 511 U.S. 1141 (1994); Matter of the Power Auth. of New York v. Williams, 457 N.E.2d 726, 730 (N.Y. 1983) (state agency cannot balance the need for a project against Its environmental impact); Matter of de Rham v. Diamond, 295 N.E.2d 763, 768 (N.Y. 1973) (state agency has neither the authority nor duty to delve into many other issues that had been investigated and decided by the Federal Power Commission in the course of extensive proceedings, e.g., the safety of the aqueduct and the appearance of the shoreline). Nor does the State have the authority to conduct a further review of alternatives in the context of the TWSD Permit or the CZM Determination, because, again, the State's authority in this area is preempted by the NGA. As to the applicability of cases decided under the Federal Power Act, 16 USC §791a et seq. to those governed by the NGA, the Supreme Court has held that similar provisions in the two statutes may be construed in similar fashion. Arkansas Louisiana Gas Co. v. Hall, 453 U.S. 571, 578n.7 (1981).

⁸ See Exhibit A to the DEIS and the FEIS.

binding on the DEP.9 Absent a stay, the FERC certificate order remains binding and effective even if a petition for rehearing and a judicial appeal is filed under NGA § 19.10 No stay of the FERC Certificate order has been issued by FERC or any Court, thus the DEP is precluded from reconsideration of project alternative and alignment issues.

Islander East takes this opportunity to note that, notwithstanding FERC's finding that construction of its pipeline facilities along the FERC-certificated route and utilizing the FERC-mandated mitigation measures is environmentally acceptable, Islander East has offered to perform additional mitigation measures beyond those required by FERC in order to meet the expressed concerns of the DEP. Data supporting these additional measures have already been provided to the DEP.

TWSD Permit: It is Islander East's earnest desire to cooperate with the State in applying for and obtaining a TWSD permit, and Islander East has taken every possible step to do so to date. However, it is also Islander East's position that the requirement to obtain a TWSD permit is subject to the preemptive effect of the NGA and the FERC Certificate. A long line of judicial precedent establishes that the NGA and the regulations promulgated by FERC thereunder prevent State and local agencies, through application of State and local laws, from prohibiting or unreasonably delaying the construction or operation of FERC-approved facilities.¹¹ It is also Islander East's position that the Moratorium, if extended and applied to Islander East, runs afoul of the Commerce Clause of the United States Constitution.

Accordingly, if the DEP elects to deny the permit, to decline to act on it by reason of the Moratorium, or to condition its issuance on payment of an excessive processing fee, Islander East's intention is to proceed under the authority of its federal authorizations.¹²

Conclusion: Time is of the essence with respect to the matters addressed in this letter. This project has already been delayed a full year from its intended schedule. Islander East now must construct its pipeline facilities and place them in operation by November 1, 2004, in order to meet the requirements of the market. This will require Islander East to commence construction by early Fall 2003. Islander East urges the State to cooperate in achieving that schedule, failing which Islander East will pursue its rights and remedies under federal law in order to make that schedule a reality.

⁹ See City of Tacoma v. Taxpayers of Tacoma, 357 U.S. 320, 335-340 (1958), Williams Natural Gas Co. v. Oklahoma City, 890 F. 2d 255 (10th Cir. 1989), cert. denied, 497 U.S. 1003 (1990).

¹⁰ See e.g., Ecee, Inc. v. FPC, 526 F. 2d 1270, 1274 (5th Cir.), cert. denied, 429 U.S. 867 (1976), Louisiana v. FPC, 483 F.2d 972, 973 (5th Cir. 1973).

¹¹ Schneidewind v. ANR Pipeline Co., 485 U.S. 293 (1988); National Fuel Gas Supply Corp. v. Public Service Comm'n., 894 F.2d 571 (2nd Cir. 1990), cert. denied, 110 S. Ct. 3240 (1990).

¹² Nat'l Fuel Gas Supply Corp. v. Pub. Serv. Comm'n., 894 F.2d 571 (2nd Cir. 1990), cert. denied, 110 S.Ct. 3240 (1990).

Mr. Charles H. Evans May 27, 2003 Page 7

Notwithstanding that the DEP's request for information concerning project alternatives and alternative routes is beyond the scope of its authority under the Clean Water Act, Islander East is providing herewith for your convenience certain materials relating to alternatives that were submitted to, and evaluated by, FERC in its analysis of alternatives. This material may be considered responsive to paragraphs 1-7 of the Addendum to your letter. Islander East is, in addition, providing herewith the technical responses and data in response to paragraphs 8-28 of the Addendum.

We will contact you shortly to establish a meeting in early June to review our responses with you.

Sincerely,

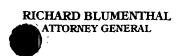
Gene H. Muhlherr

cc: Cori Rose, U.S. Army Corps of Engineers
Mike Ludwig, National Marine Fisheries Service
David Carey, Department of Agriculture / Bureau of Aquaculture
Joanne Wachholder, Federal Energy Regulatory Commission
Michael Marsh, US Environmental Protection Agency

_APPENDIX H

July 9, 2003 letter from CT Attorney General







Office of The Attorney General State of Connecticut

55 Elm Street P.O. Box 120 Hartford, CT 06141-0120

Tel: (860) 809-5020 Fax: (860) 808-5347

July 9, 2003

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DEP OFFICE OF LONG ISLAND SOUND PROGRAMS

Mr. Charles Evans
Office of Long Island Sound Program
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106

Dear Mr. Evans:

I have been informed that the Office of Long Island Sound Programs ("OLISP") is reviewing the application of Islander East Pipeline Company, LLC ("Islander East") for a certificate of consistency with the Council Zone Management Act ("CZMA"). I understand that this evaluation is prompted by a review from the United States Department of Commerce ("Commerce"). Specifically, Islander East filed a CZMA application which was denied on October 15, 2002, which denial was subsequently appealed, pursuant to federal law, to the Department of Commerce. During the pendency of this appeal, a sufficient number of amendments were made to the original plan that a remand was necessary to permit OLISP to reconsider the matter.

I am writing to offer my comments on the Islander East proposal relative to the CZMA process and provide OLISP with information that may be helpful in its administrative review.

Background

1. The Project.

As you are aware, Islander East proposes to build a 50-mile long interstate natural gas pipeline creating an additional link between the Connecticut and Long Island markets. Approximately 19 miles of the pipeline would be constructed under the Long Island Sound.

As described in the company's literature, the purpose of the project is to provide 285,000 dekatherms per day (Dth/d) of natural gas to Long Island, enough to heat about 600,000 homes. This description of the project's purpose is repeated in the Environmental Impact Statement, released August, 2002, ("EIS"), prepared by the staff of the Federal Energy Regulatory Commission ("FERC") as mandated by the National Environmental Policy Act, 42 U.S.C. § 4321, et seq. ("NEPA").

2. Coastal Zone Impacts.

As described in the EIS, the project will involve both onshore and offshore impacts in and around the Long Island Sound. In this regard, it is difficult to overstate the importance, environmentally, esthetically, and economically, of the Sound. More than a decade ago, an independent analysis prepared for the United States Environmental Protection Agency concluded that annual shellfishing and finfishing resources could be valued at approximately \$148,000,000. Recreational use was valued in excess of \$300,000,000 and the total of all direct and indirect economic use of the Sound produced a "total use value" of more than \$5,200,000,000. Coastal wetlands associated with the Sound added another \$90-100,000,000. And all of this, it must be stressed, was calculated in 1990 dollars. Staggering as these numbers are, they do not begin to tell the full story.

Prior to European colonization, the Sound supported a vast and interconnected ecosystem of immense productivity. Even after centuries of human impact, industrial pollution and overfishing, the Sound remains, "an 'essential fish habitat' (EFH), defined as being necessary for fish spawning, breeding, feeding, or growth to maturity, for a variety of fish species." Connecticut Siting Council Findings of Fact, Dckt. No. 197, TransEnergie Application for Certificate of Environmental Compatibility and Public Need, March 28, 2001, para. 86. In fact, "Long Island Sound is an environment used by Kemps ridley, Loggerhead, Green, and Leatherback marine turtles [which species] are listed as State or Federal Endangered or Threatened Species, according to Connecticut DEP and NOAA National Marine Fisheries Service." Id., para. 83. Consequently, it is no exaggeration to say that protecting the last vestiges of a heavily impacted but still critically important natural resource is an important national interest.

While the entire Sound is important, there appear to be within it areas that have suffered less from development and industrial activity or otherwise have especially important resources. As noted in recent testimony before the Connecticut Siting Council regarding the Islander East project, the specific area that will be affected along the Connecticut coast, sometimes referred to as the Thimble Islands area, is both unusually important and vulnerable. "This particular area has been, -- first of all from a historical standpoint, the Thimble Island area has been essential for an oystery fishery for over a hundred years. That's fairly well documented. There are a great many oyster beds in the immediate area that have been very important to the shellfish industry for quite some time as I said. Some of the ground is both used also for clams and oysters. Sometimes you can get two crops on one piece of ground." (Testimony of L. Williams, April 17, 2002, p.85).

The project envisioned by Islander East is monumental both in scope and effect. As one expert testified, the Islander East project will be "one of the major most impactful environmental

effects on Long Island Sound, the New York side as well as Connecticut, that I've ever seen." (Testimony of Dr. L. Stewart before the Connecticut Siting Council, April 12, 2002, p. 194.)

Offshore, the project proposes use of horizontal directional drilling ("HDD") to bring the pipe from landfall to a point (the "punchout" point) approximately 3500 feet from shore. (EIS, pp. 3-37, 3-62 to 3-63.) From there, Islander East plans to construct, by clamshell dredge, a transition pit or trench from where the HDD will exit for a distance of about 1 to 2 miles. (Id.) From that point to the New York landfall, a plow will be used to bury the pipe. As planned, the project would include in excess of 22 miles of pipeline under the Long Island Sound. Onshore, the route chosen by the company would require clearing woodlands owned and managed by the Branford Land Trust, filling and trenching in many acres of wetlands, and extensive excavations in various residential neighborhoods. (See, EIS, pp. 3-98, 3-131.)

The EIS identifies a number of serious environmental impacts. Approximately 30 acres of wetlands would be disturbed by the construction itself and these acres would be subject to continual disruption due to periodic maintenance operations along the pipeline. (EIS, p. 3-98.) Not only would this construction result in serious damage to coastal wetlands directly tied into the greater Connecticut coastline ecosystem, but the project's ongoing maintenance activities would result in *permanent* changes to a number of important and environmentally-sensitive areas. (See, EIS p. 3-80.)

Offshore, impacts may be even more severe. Specifically, the company plans to connect the land-based portion of the project to the main deep-water pipeline trench by using horizontal directional drilling ("HDD") to bore under the beach for about 3500 feet into deeper water. (EIS, pp. 3-37, 3-62 to 3-63.) The HDD would, however, erupt in the middle of the valuable shellfish habitat between Branford Harbor and the Thimble Islands, in an area that has been spared development over the years and is so pristine that it has been referred to as a perfect location for a marine sanctuary. (Testimony of Dr. L. Stewart before the Connecticut Siting Council, April 12, 2002, p. 254.) As Dr. Stewart stated, the HDD would release huge quantities of bentonite drilling mud "smack dab in the middle of one of the most highly valuable, multiple marine ecological environments there is on the coast of Connecticut." (Id. at 236.) Even the company's own expert said of the Thimble Islands area that "the resources include both the commercial fishery and the recreational aspects of the area, the view vista, and the diversity of the habitat, it's a very sensitive area. . . . " (Testimony of Dr. Bohlen before the Connecticut Siting Council, April 16, 2002, p. 34.)

It is in this "very sensitive area" that Islander East plans to dig the HDD punchout hole and accompanying dredged pit. (EIS, p. 3-62.) The company's activities in this regard, involving only the HDD drilling phase, will result in releasing "approximately 448,300 barrels" of bentontite drilling fluid into the environment and excavating a bowl-shaped undersea pit approximately 250 by 300 feet in size to a depth of 20 feet. (EIS, p. 3-53.) This phase alone will

impact 23 acres of prime shellfish habitat, all in an area of unsurpassed natural diversity and beauty. (See, EIS, p. 3-45, table 3.3.3-1.)

The impacts to coastal resources, however, are not limited to the initial phase of this project. From the HDD outfall point, the pipe is to be laid in a trench for part of the way across the Sound and then buried by jet plow for the remainder of the distance to Long Island. The EIS, and the Findings of Fact of the Connecticut Siting Council, clearly show the extent to which this effort will impact marine resources. It is estimated that 3000 acres of underwater habitat will be disturbed. (EIS, p. 3-45.) The amount of sediment that this project will disturb is staggering -dredging phase, 44,700 cubic yards, and plowing, up to 504,400 cubic yards. (EIS, p. 3-44.) In addition to these impacts, Islander East predicts that the dragging and other movement of the cables anchoring the work barges (an effect known as 'cable sweep') would damage an area far from the actual trench cuts and up to 2500 feet from the barges. (EIS, p. 3-71.) Further, Islander East estimates that the repeated barge re-positionings will result in up to 120 anchor holes per mile of pipeline trench. (EIS, p. 3-71.) Anchor holes are relatively deep in terms of topography of the seafloor and create oxygen-deprived sediment traps that persist for many years and have a serious adverse impact on shellfishing operations. As the EIS concludes, all of this may "represent a long-term conversion of shellfish habitat [into habitat which will not support shellfish]." (EIS. p. 3-71.)

In addition to the direct impacts just described, the EIS clearly shows that there would be important indirect impacts as well. For example, "the water and sediment quality of many coastal waters in the area are impacted by proximity to urban centers and by industrial and agricultural activities. Pollutants enter in the form of sewage effluent, industrial discharge, dredge spoils, urban runoff, riverine discharge, and atmospheric deposition". (EIS, p. 3-42.) Not surprisingly, therefore, when Islander East took sediment samples (a total of only 23 for about 20 miles of seafloor), they discovered toxic metals in some of the samples at levels indicating contamination. (EIS, p. 3-43.) Of course, disturbance of hundreds of thousands of cubic yards of contaminated sediments will re-mobilize the pollutants, resulting in additional adverse effects on coastal resources, which impacts cannot even be analyzed because a proper data set has not yet been prepared. (See, Letter of the EPA to the FERC, dated Sept. 30, 2002.)

The impacts described above are particularly acute because past experience in the Sound has demonstrated that the effects of underwater construction operations persist for decades and effectively eliminate any possibility of commercial shell fishing operations into the foreseeable future. (Testimony of Dr. L. Stewart before the Connecticut Siting Council, April 12, 2002, p. 192; EIS, p. 3-70.) Overall impacts to the Sound, therefore, include excavation of hundreds of thousands of cubic yards of sediment, some of which has been contaminated by various toxic substances, destruction of hundreds of acres of shellfish habitat and degradation of water quality, primarily by sedimentation.

In this regard, it is informative to note the comments of Mr. John Volk, the former Director of the Connecticut Bureau of Aquaculture, on this project in a letter to the ACOE. He states, after noting the variety and wealth of shellfish and other natural resources in the affected area, that:

The use of a plow or jet sled for pipe burial through a sea floor corridor of approximately 23 miles, will result in impacts due to suspended sediment, alteration and/or destabilization of the sea floor, and damage or death to marine life.

An additional concern regarding this project and other proposed submarine utility projects, is the potential cumulative impacts to Long Island Sound's habitat, water quality and fisheries. . . . Alternatives and options regarding energy sources, siting and construction methods should be fully assessed on a regional basis by the regulatory community.

Consequently, Director Volk concluded:

We have determined that the siting and the construction methods for the marine phase of the project will likely cause significant damage and harm to shellfish resources and shellfish habitat. Shellfish aquaculture, commercial and recreational shellfish harvest operations, are likely to be impacted as well. This determination is based on the review of the information provided in the above referenced documents, consultations, as well as staff field experience with a similar project. We therefore recommend that the marine portion of the current application be denied.

II. Relevant State Law.

The Connecticut legislature has established a set of guiding principles for evaluating coastal impacts.

The General Assembly finds that the growing population and expanding economy of the state have had a profound impact on the life-sustaining environment. The air, water, land and other natural resources, taken for granted since the settlement of the state, are now recognized as finite and precious. . . . Therefore the General Assembly hereby declares that the policy of the state of Connecticut is to conserve, improve and protect its natural

resources and environment and to control air, land and water pollution in order to enhance the health, safety and welfare of the people of the state. It shall further be the policy of the state to improve and coordinate environmental plans, functions, powers and programs of the state . . . and to manage the basic resources of air, land and water to the end that the state may fulfill its responsibility as trustee of the environment for the present and future generations.

Conn. Gen. Stat. § 22a-1

The legislature has gone further, expressly defining the policy of the state with respect to the Long Island Sound. In doing so it made numerous legislative findings, including the following:

- (1) The waters of Long Island Sound and its coastal resources . . . form an integrated natural estuarine ecosystem which is both unique and fragile;
- (2) Development of Connecticut's coastal area has been extensive and has had a significant impact of the Long Island Sound and its coastal resources; ...
- (5) The coastal area is rich in a variety of natural, economic, recreational, cultural and aesthetic resources, but the full realization of their value can be achieved only by encouraging further development only in suitable areas and by protection of those areas unsuited to development;
- (6) The key to improved public management of Connecticut's coastal area is coordination at all levels of government and consideration by municipalities of the impact of development on both coastal resources and future water-dependent development opportunities when preparing plans and regulations and reviewing municipal and private development proposals; and
- (7) Unplanned population growth and economic development in the coastal area have caused the loss of living marine resources, wildlife and nutrient-rich areas, and have endangered other vital ecological systems and scarce resources.

Based upon its findings as described above, the legislature has established a set of goals and policies to govern the management of resources in and around the Long Island Sound as follows:

- (2) To preserve and enhance coastal resources in accordance with the policies established by chapters 439, 440, 446i, 447, 474 and 477;
- (3) To give high priority and preference to uses and facilities which are dependent upon proximity to the water or the shore lands immediately adjacent to marine and tidal waters;
- (4) to resolve conflicts between competing uses on the shore lands adjacent to marine and tidal waters by giving preference to uses that minimize adverse impacts on natural coastal resources while providing long term and stable economic benefits;

•••

- (9) To coordinate planning and regulatory activities of public agencies at all levels of government to insure maximum protection of coastal resources . . .; and
- (10) To insure that the state and coastal municipalities provide adequate planning for facilities and resources which are in the national interest as defined in section 22a-93 and to insure that any restrictions or exclusions of such facilities or uses are reasonable. Reasonable grounds for the restriction or exclusion of a facility or use in the national interest shall include a finding that such a facility or use: (A) May reasonably be sited outside a coastal boundary....

Conn. Gen. Stat. § 22a-92.

State law, therefore, provides several principles that are important in evaluating the Islander East proposal. These include a mandatory preference for water dependent uses if conflicts occur with economic development projects, a clear emphasis on protection of threatened resources, and a statutory right of denial of projects that may reasonably be sited elsewhere. Consequently, it is critical to examine the Islander East project with a view to its demonstrable impacts, the nature and quality of the resources threatened, and whether the project purpose can be successfully accomplished by a less environmentally damaging alternative. To accomplish this, it is necessary to examine initially the defined project purpose.

Purpose.

As noted above, "[t]he purpose of the Islander East Pipeline Project is to provide transportation service for 285,000 dekatherms of natural gas from supply areas, including eastern Canada, to energy markets in Connecticut and New York (specifically Long Island and New York City)." (EIS, p.2) By its terms, therefore, the point of the project is to get natural gas to Long Island.

There are, however, two major issues regarding the defined project purpose. The first is that the officially defined purpose does not survive close scrutiny. The second, and more important issue, is that absolutely nothing in the defined project purpose necessitates use of any particular pipeline route and pursuant to Conn. Gen. Stat. §§ 22a-92, 93(17), 105, 106, and 108, it is a violation of the CZMA to locate non-water dependent activities with significant impacts in sites physically suited for water-dependent uses, particularly when alternatives are available. See also, Section 404(b)(1) of the federal Clean Water Act, 33 U.S.C. § 1251, et seq.

With regard to the first issue, the market need identified by Islander East is suspect at best. It appears that the market analysis data upon which Islander East predicated its statement of natural gas demand on Long Island predate the events of September 11, 2001 and the ongoing economic slowdown.

As the attached report (Exhibit A) shows, the "need" for this project was based on what are termed "precedent agreements" entered into with the developers of proposed electric power generation stations on Long Island. However, these developers have either ceased project development or have made alternative arrangements for fuel supply. (Ex. A, p. 2.) Ultimately, Islander East has "substantially overstate[d]" the anticipated growth of the natural gas market on Long Island and has failed to properly consider the additional pipeline infrastructure programs currently proposed or under construction. <u>Id</u>. The result is that, while Islander East continues to announce its project purpose as providing 285,000 Dth/day to Long Island, the supposed project need has no justification and is, in fact, chimerical.

Further, it is clear that current information suggests that the Islander East project could well have a detrimental effect on economic activity. Specifically, independent regional regulators have already described the natural gas supply situation in New England as "tight-asdrum" and noted that inducing "additional demand stress . . . competing for the existing delivery capacity of New England's pipelines has potentially ominous strategic implications for the security of New England's power supply." (Steady-State Analysis of New England's Interstate Pipeline Delivery Capacity 2001-2005, produced for ISO-New England, Inc.) (Emphasis in original.) More recently, Alan Greenspan has stated in a published news report (Ex. B) that supplies of natural gas are expected to be limited for a prolonged period. If true, this means an increase in prices, which would substantially depress the potential market on Long Island. As

the attached report states: "growth in gas demand is sensitive to changes in the price of gas. High and volatile gas prices typically inhibit demand growth." (Ex. A, p 8.) Consequently, Islander East has built its project on a false statement of need.

This leads to a second, but related, issue. Even if Islander East's unsupported assumptions are accepted, purely for argument's sake, the proposed purpose can be satisfied by any of a variety of alternatives. Simply put, if the goal is to transport more natural gas to Long Island, there is no reason that the pipeline needs to be placed in the Thimble Islands reach of the Sound.

For example, the FERC staff concluded its independent project review and stated:

We evaluated six system alternatives, one of which, the ELI System Alternative, is based on Iroquois' ELI Extension Project. The second is based on Tennessee's planned Connecticut-Long Island Lateral Project. The third is based on other existing or planned systems in New York or New Jersey and the fourth is based on the local distribution company's (KeySpan) existing facilities. We also considered two other system alternatives (the One-Pipe System Alternative and the Long Island System Alternative) both of which would carry the total volumes of the ELI Extension Project and the Islander East Project.

We have determined that one of these system alternatives, the ELI System Alternative, is environmentally preferable because it has a shorter Long Island Sound crossing, avoids more shellfish leases, and would only have air quality and noise impacts onshore in Connecticut. The impacts on Long Island would be identical to the Islander East Project.

Our analysis of the system alternative offshore pipeline indicates the crossing of the Sound would be reduced by 5.5 miles. The ELI System Alternative would open-cut about 936 feet of shellfish leases, avoiding direct impacts to other near shore leases by tapping into Iroquois' existing pipeline offshore. Islander East would open-cut about 6,141 feet of shellfish leases, avoiding direct impact to other leases by drilling the Connecticut shoreline. Construction offshore would impact 2,930 acres for the ELI System Alternative and 3,106 acres for the proposed project. For a more complete discussion of the offshore impacts of the ELI

System Alternative see the discussion of Iroquois' offshore pipeline in the Environmental Report for the Eastern Long Island Extension Project filed in Docket No. CP02-52-000.

Based on our environmental analysis, the ELI System Alternative is environmentally preferable to the proposed route because it reduces onshore and offshore impacts, except for emissions.

The conclusion reached by the staff of the FERC has been echoed by essentially every independent regulator which has reviewed this project. For example, the United States Environmental Protection Agency ("EPA") has stated:

ELI system alternative. This alternative would be shorter in length in the Connecticut onshore portion, as well as the Long Island Sound offshore portion, although there would be differences in terrain traversed (no detail provided). It would cross fewer streams and would apparently avoid shellfish beds in Long Island Sound. No information is provided about the potential wetland impacts associated with the ELI alternative. The limited analysis allows for a conclusion that the ELI alternative appears to meet the project purpose and need with a reduced potential to impact the environment.

The Army Corps of Engineers similarly noted that:

The analysis, although incomplete, appears to suggest that the [ELI] alternative would be practicable, shorter in length (both onshore and offshore), cross fewer streams, avoid designated shellfish beds, affect fewer residences, and minimize trenching in the nearshore environment. Consequently, the ELI alternative . . . appears to meet the stated project purpose and need while discernably reducing potential adverse impact to the aquatic environment.

Letter of Christine Godfrey, Chief, Regulatory Division of the ACOE, dated June 17, 2002 to the FERC.

More importantly, even if one assumes that the need for natural gas advanced by Islander East both exists and is a legitimate purpose, there is nothing in this definition of project purpose that presupposes that only one particular pipeline route can satisfy that need. If there is, in fact, a need for 285,000 Dth/d of natural gas on Long Island, then it clearly does not matter, from the

standpoint of "need," how that quantity of natural gas gets there or the pipeline route taken to reach Long Island. Thus, the claim by Islander East that a certain amount of gas needs to be made available does not translate into a conclusion that only a pipeline through the Thimble Islands will address and meet that need.

Consequently, in the necessary balancing of water-dependent uses versus economic benefit that must be undertaken in evaluating this project, it is clear that the benefit will not be there at all, certainly from the perspective of New England. The importance of the water-dependent use, on the other hand, is clearly evident and the threat to this use is significant. Connecticut's stewardship of the Sound and the significant measures taken by it to preserve and improve the essential natural characteristics of this environmental resource will be undermined if this project is approved. Further, there is no reason why the benefit, if it exists, cannot be obtained by simply moving the proposed pipeline route out of the critical habitat area. To the contrary, each and every regulator which has reviewed this project has concluded that the alternative route proposed by the ELI project is superior. Thus, in the absence of any evidence, let alone credible evidence, that only the one designated route is feasible, and the conclusive evidence of at least one feasible and preferable alternative, the law plainly requires denial of this application.

Conclusion

Ultimately, Islander East has used obsolete and questionable data to create a "need" for natural gas that does not exist. Even if there were a real need, it could be satisfied by any of a number of less damaging alternatives. Under state law, it is clear that the precious and heretofore untouched resources of the Thimble Islands cannot be destroyed to permit a profoundly damaging project that, if it truly needs to be built, can easily be relocated to less critical areas.

Very truly yours,

RICHARD BLUMENTHAL

Attorney General

TO: Robert Snook, Esq.

FROM: Philip Sussler

RE: Assessment of "Need" for the Islander East proposed gas pipeline

DATE: March 20, 2003 (revised)

Introduction:

The Islander East project (the "Project") is a proposed natural gas pipeline running from Connecticut, across Long Island Sound, to Long Island, New York. The project will interconnect with the existing C-system of the Algonquin pipeline ("AGT") at North Haven, CT, will enter Long Island Sound at Branford, CT, and will come ashore on Long Island at Wading River (near Brookhaven, N.Y.) and interconnect on Long Island with the gas distribution system of KeySpan Energy ("KeySpan"), the local gas distribution company (or "LDC") serving Long Island.

The Project also entails upgrades to the existing Algonquin pipeline system in Connecticut affecting approximately 13.7 miles of existing parallel pipelines and the installation of a new compressor station by AGT in Cheshire, CT. The Project proposes to lease these incremental facilities on the AGT system. Approximately 22.6 miles of the proposed new pipeline will be located offshore in Long Island Sound, 10.2 miles will be located on onshore in Connecticut and, 12 miles located onshore in Long Island. The Project is sponsored by a limited liability company formed by subsidiaries of Duke Energy, the owner of AGT, and KeySpan. The anticipated construction cost of the Project is \$149.6 MM and its originally anticipated in-service date was November 1, 2003. Commencement of construction has been delayed pending receipt of necessary regulatory and environmental permits.

The Project filed for a certificate of public convenience and necessity ("CEPCN") with the Federal Energy Regulatory Commission ("FERC") on June 15, 2001. FERC issued its Preliminary Determination ("PD") for the Project on December 21, 2001, in which it approved the economic and regulatory (non-environmental) aspects of the Project. Islander East Pipeline Co. LLC, 97 FERC ¶61,363 (2001). FERC reserved for later decision issuance of the certificate, pending its review of the environmental impacts of the Project, which it then decided, issuing the CEPCN to the Project, in its order issued on September 19, 2002, Islander East Pipeline Co. LLC, 100 FERC ¶61,276 (2002). Subsequent to these FERC approvals, the Project failed to receive its consistency approval under the Coastal Zone Management Act from the Connecticut Department of

¹ The Project is proposed to be approximately 44.8 miles in length and consist of a 24-inch, pipe with 900 pounds per square inch maximum allowable operating pressure.

Environmental Protection ("DEP"). In addition, the Project's approval from the Army Corps of Engineers is still pending.

This report assesses and critiques the "need" for the proposed pipeline.

Summary and Conclusions:

Islander East premises the need for its project on precedent agreements indicating commitment for 260,000 Dth/day out of the total proposed incremental capacity of 285,000 Dth/day. The power plant developer counter-parties to these precedent agreements do not need the incremental capacity, either because (in the case of AES) they appear to have ceased project development or (in the case of ANP) have made alternate arrangements. The LDC counter-party is a partner in the proposed pipeline so it is not clear whether and to what extent its commitment to utilize the gas is binding. Islander East also premises the need for its project on a general assessment of the gas market on Long Island that substantially overstates the anticipated growth rate of gas usage on the island (by a factor of 4 or more) and inflates substantially the likely gas requirements of the power sector. In addition, the Islander East market study fails to analyze the ability of the substantial increases in gas pipeline delivery infrastructure planned and/or under construction for the New York City metropolitan area to fully displace any requirement for the relatively small incremental volumes which will be made available by the Islander East project.

Detailed Discussion:

The Project's sponsor, in its application for a CEPCN to FERC, justified the need for the Project, in part, by submitting "precedent agreements" for rights to transport volumes of gas. These agreements were with different divisions of KeySpan for delivery to its New York City area (referred to as "KEDNY") and Long Island area (referred to as "KEDLI") local gas distribution systems and with two developers of proposed power plants on Long Island, namely: (a) AES Endeavor, a division of AES Corporation (AES Calverton); and (b) Brookhaven Energy Limited Partnership, an affiliate of American National Power (ANP Brookhaven). The Project will serve primarily as a radial extension of the existing AGT system and will permit the transportation of gas supply from the existing AGT system to delivery points on Long Island. The Project itself adds no new gas supplies, rather it is a build out and extension of the existing gas transportation infrastructure.

The specific transportation volume commitments indicated in each of the precedent agreements entered into by Islander East are as follows:

	Table I – Isl	ander East Pro					
	Maximum Daily Quantity at Year Beginning						
Proposed Customer:	11/1/03	11/1/04	11/1/05	11/1/06	11/1/07	11/1/08	
ANP Brookhaven	90,000	90,000	90,000	90,000	90,000	90,000	
AES Endeavor	60,000	60,000	60,000	60,000	60,000	60,000	
KEDLI maximum (after yearly election)	60,500	82,500	112,750	134,750	162,250	162,250	
KEDLI minimum (after yearly election)	60,500	71,500	92,000	114,000	138,000	_162,250	
KEDNY maximum (after yearly election)	49,500	67,500	92,250	110,250	132,750	132,750	
KEDNY minimum (after yearly election)	49,500	58,500	75,500	93,000	112,000	132,750	
Total Maximum MDQ ³	260,000	300,000	355,000	395,000	445,000	445,000	
Total Minimum MDQ	260,000	280,000	317,500	357,000	400,000	445,000	

The proposed transportation capacity of the pipeline will be initially 285,000 DTH/day. The remaining 25,000 DTH/day of available capacity (after accounting for the volumes designated in the precedent agreements) is proposed for interruptible and short-term services. The timing and scope of upgrades to the line to increase the capacity to accommodate the maximum volumes authorized under the precedent agreements in later years is "not certain" (IE application, p.22). Required upgrades would occur through the addition of incremental compression capacity and pipeline looping. *Id.* at 22.

The Project sponsors assert that these projected incremental transportation volumes will be demanded and can be met by the proposed Project for delivery into Long Island and that, implicitly, existing and other new gas infrastructure projects are insufficient to meet the same requirements.⁴ As described in greater detail below, these assertions are problematic or incorrect and/or based on faulty assumptions.

Iroquois Pipeline also applied for a CEPCN with FERC to approve a pipeline project (the so-called ELI project) crossing Long Island Sound from Milford, CT, to Brookhaven, LI, with an anticipated delivery capacity of 175,000 DTH/day. This project, although executing precedent agreements with different counter-parties than Islander East, essentially paralleled the Islander East project and would have served the same ultimate market on Long Island. FERC issued a PD approving the non-environmental aspects of the ELI project by order, dated September 19, 2002, 100 FERC ¶61,275 (2002). Iroquois

² Application of Islander East Pipeline Company, LLC, FERC docket CP01-384-000 (June 15, 2001) at p. 21. (The Islander East FERC application is referred to hereafter as the "TE Application").

³ MDQ is the maximum daily quantity measured in dekatherms. A dekatherm is 10 therms. A therm has the heating content equivalent of approximately 100 cubic feet of natural gas.

⁴ These assessments of the gas market on Long Island are contained in a report prepared by Merrimack Energy for Islander East and filed as Exhibit I-1 in the IE Application.

has reportedly subsequently withdrawn the project based on, among other factors, uncertainties relating to permitting and lack of adequate demand. Iroquois' withdrawal of the ELI project is, at a minimum, indication that incremental demand beyond that asserted to exist by Islander East is insufficient to support incremental pipeline capacity.

In the remainder of this report, we analyze the Islander East Pipeline Project's projected demand, by focusing on the asserted two groups of potential users of the facility – the power plant developers (AES and ANP) and the LDC (KEDLI and KEDNY).

Power Plant Developers.

The two power plant project developers which signed precedent agreements to utilize the pipeline, either are currently not going forward with further project development (AES) or have negotiated alternative arrangements to acquire gas supplies (ANP). The volumes nominated under these precedent agreements comprise more than half of the capacity of the line; so that uncertainty about the commitments of these developers is a critical issue for the viability of the pipeline.

AES, the parent of the entity developing the AES Calverton project, is a global power plant developer and operator. Along with many other companies in the electric power generation business during the past year, AES has experienced extreme financial stresses entailing the selling of power plant assets, the surrender of assets to secured lenders and the halting of power plant development efforts. Reflecting this status, the AES Calverton project has not advanced in development. While no official announcement has been issued canceling the project, it is anticipated that the project will not be pursued.

The ANP Brookhaven project, a proposed natural gas-fired 580 MW electric generating plant located in Brookhaven, Long Island, has undertaken gas supply arrangements which do not require it to utilize the Islander East pipeline, if the pipeline is not constructed. The ANP project was granted a certificate of environmental compatibility and public need by the New York State Board on Electric Generation Siting and the Environment ("NYSB") under New York's so-called Article X process, by orders dated April 8, 2002 (the "Recommended Decision) and August 14, 2002 (the "Final Order"), in Case No. 00-F-0566. The Final Order was later confirmed in an "Order Denying Petition for Rehearing and Granting Petition for Clarification" dated October 24, 2002. The Long Island Power Authority ("LIPA"), the franchised electric utility operating on Long Island, objected to the project and intervened actively against it during the course of the proceeding.

In its review of the ANP project, the NYSB noted that the project "may be able to directly connect to the proposed Islander East Pipeline facility." But, it also noted that the project

⁵ The New York Public Service Commission's web-site for Article X applications does not indicate that the AES/Calverton project has even initiated the Article X process by filing any preliminary scoping statements.

may negotiate with KeySpan Energy if the Islander East Pipeline Company facility is not a viable option. The topic agreement describes the upgrades KeySpan Energy's distribution system would require if it were to supply gas to the [ANP] Project. If the upgrades are installed, no adverse impacts are expected to occur to the existing gas transmission and distribution systems from the operation of the Project. Recommended Decision at 52.

The ANP project is anticipated to begin construction in the first quarter of 2003, with construction anticipated to take approximately two years.

Both precedent agreements entered into by Islander East and AES and ANP have termination and cancellation dates, which may be exercised if the pipeline project fails to receive its required permits by certain dates. Specifically, AES can cancel the precedent agreement, if permits are not granted to the pipeline project by certain outside dates, all of which have now passed. ANP can similarly cancel its precedent agreement. In addition, ANP and AES each had a one-time option, which must have been exercised by June 1, 2002, to reduce their capacity commitments by up to 40,000 and 20,000 DTH/day, respectively. It is not known whether these cancellation and/or volume reduction options have been exercised. If such rights have been exercised in light of the development uncertainties and issues facing the power projects, this would eliminate a substantial portion of the anticipated usage of the proposed pipeline.

The Merrimack Study, utilized to justify the Islander East project, also analyzed power plant sector gas demands as a general matter. The Study sought to demonstrate a continuing general need for gas supplies to serve new power plant construction on Long Island, buttressing the specific volumes nominated in the executed precedent agreements. This analysis, however, incorrectly identifies anticipated developments in that sector and inflates the likely gas requirements relating to power plant development.

Both the proposed ANP and AES power projects together (comprising over 1000 MW in installed capacity) and the ANP project alone exceed the projected growth in summer electric peak load on Long Island of 313 MW for the period 2002-2005.⁶ It is also the case, that new electric generating capacity, if constructed, will operate typically at substantially improved efficiencies when compared with older generation, with conversion efficiencies (converting a given amount of gas into electricity) nearly 40% better than existing generating facilities. Thus, if the ANP plant is constructed it can be anticipated to displace existing oil and gas-fired electric generation located on Long Island, producing more power utilizing substantially less gas than equivalent generation produced by existing facilities. The Merrimack Study also incorrectly assumed that

⁶ New York Power Alert, II (2002). The Power Alert II study issued by New York Independent System Operator ("NYISO") substantially revised the forecasts for incremental power generation in New York from those utilized by Islander East in its market study. Power Alert II revised the need for new electric generation in New York downwards by 17%. This reduction was due to, among other things, a shift in some electric demand to PJM, the power pool serving primarily Pennsylvania, New Jersey and Maryland, reductions in electric demand due to 9/11 and the recent installation of 440 MW of peaking generation by the New York Power Authority throughout the NYC metropolitan area.

needed electric generating capacity was a proxy for incremental gas requirements. In reality, incremental electric generation capacity is required in large part to serve peak electric loads only and does not run continuously. These electric loads are more likely to occur during summer periods when the LDC demand for gas is likely to be low – such that the electric power generation requirements are not additive, as the Merrimack Study incorrectly assumes, with that servicing the KeySpan gas distribution requirements.

The Merrimack Study also fails to consider other developments in the electric sector which will impact gas demand on Long Island. Specifically, the TransEnergie 330 MW electric transmission cable running from Connecticut to Long Island, constructed but not yet energized, if it operates can be anticipated to transmit lower cost power from New England to Long Island so as to further displace the need for incremental gas-fired generating capacity on Long Island. Further, the Merrimack Study, reflecting the period when it was prepared, does not analyze the recent transforming changes in the electric generation sector following the collapse of Enron in late 2001. Across the sector, companies engaged in electric generation (similar to and including AES) have been forced to sell assets, recapitalize their balance sheets and discontinue development efforts. Merchant plants lacking firm long-term contracts to sell their power, such as the ANP project, have been unable to achieve or secure financing and generally shut out of the credit markets. New electric generation projects across the country, including New York, have been put on hold or cancelled.

To summarize, with respect to the two power projects which had signed up for the Islander East pipeline, the AES plant is not advancing and likely will not be developed; and the ANP plant has alternative sources for its gas. More generally, the anticipated general need to add power plant capacity on Long Island is not likely to require the incremental transport volumes made available by the proposed pipeline.

2. Gas LDC Demands.

In addition to the asserted demand for Islander East resulting from proposed power plant projects on Long Island, the Project also premised a major portion of the anticipated usage of its facilities to stem from the gas requirements of the KeySpan local gas distribution operations on Long Island through KEDLI (serving Nassau and Suffolk Counties) and through KEDNY (serving Queens and Brooklyn, New York).

To put the project's anticipated usage rates in perspective, the maximum volumes committed for by KeySpan under precedent agreement with Islander East constitute 4.5% of peak-day send-out of the KEDNY system, 9.5% of the KEDLI system and 6.4% of the combined systems. It is simply not the case that Islander East's proposed transport volumes, equivalent to a relatively small portion of KeySpan's overall usage, can only be met by the Islander East facilities and cannot be satisfied from existing infrastructure or

⁷ These percentages are calculated utilizing KeySpan's reported send-out volumes for 1999/2000 as reported in the Merrimack Study.

other proposed gas infrastructure expansions serving the New York City metropolitan area.

KeySpan acquires the majority of its gas supply through the so-called New York Facilities System, which supplies some 60% of the natural gas requirements of the metropolitan New York City area, including Long Island. KeySpan also relies on local gas injection facilities (primarily LPG and LNG) to meet its peak load requirements. It also is currently serviced by two pipelines connecting to Long Island, Iroquois and Transco. A substantial number of other new natural gas pipeline projects have been proposed and are under construction to provide service into the New York metropolitan area which would more than satisfy KeySpan's incremental needs proposed to be met by the Islander East Project. These projects include the MarketLink, Millenium and Eastchester gas pipeline projects. A listing of these projects is attached as Table II at the end of this report.

Charles River Associates, in a recent report completed for NYISO and the New York State Energy Research and Development Authority ("NYSERDA") concluded as follows:

Substantial expansion of the New York pipeline infrastructure is already underway. With projects that have recently been completed or are expected to be completed by the end of 2003, a total of 465 thousand dekatherms (MDT) per day of new delivery capacity will be available into the downstate region. This additional capacity represents a 7 percent increase in delivery capacity to the State and a 16 percent increase into the downstate region, and exceeds forecasted growth in nongeneration gas demands through at least 2005.

In addition to the 465 MDT per day of expansions already being added, the Federal Energy Regulatory Commission (FERC) has provisionally approved projects that could provide a total of approximately 800 MDT per day, primarily to the downstate region.⁹

Islander East's maximum day delivery capacity would comprise only 22% of this incremental capacity (both under construction and proposed).

The Millenium project runs 442 miles from Lake Erie to Mount Vernon, New York and has capacity for delivering 700,000 DTH/day, with capacity to deliver up to 350,000 DTH/day at its Westchester terminus and available to serve the metropolitan New York City area. The EastChester project alone, extending the Iroquois pipeline from Northport Long Island into the Bronx, will serve an incremental 220,000-330,000 DTH/day on a long haul basis into the New York City area. See Table II below.

⁹ CRA, The Ability to Meet Future Gas Demands for Electricity Generation in New York State, prepared by for NYISO and NYSERDA (July, 2002) at 1 (referred to herein as the "CRA Report"). The 456,000 DTH/day capacity does not include Islander East. Id. at ___, n.22. The cited 800,000 DTH/day in provisionally approved gas transportation capacity should be reduced to 515,000 DTH/day, exclusive of the Islander East capacity which was counted in arriving at the 800,000 DTH/day cited in the text. This lower value still comprises a very large expansion in pipeline deliverability to the New York down-state region.

In addition, Islander East premised the volumes committed to KEDNY and KEDLI on excessive projected rates of growth of gas demand on their systems. Islander East—projected a 6% annual growth rate for gas throughput in its market study for the period from 2003 to 2010. It is highly unlikely that anything close to this growth rate will be reached. This projection should be compared with a growth rate of 1.2% made by the federal Energy Information Agency for the Middle Atlantic region. Population, a key driver of gas consumption, is anticipated to grow very slowly on Long Island (at 0.5% annually). In addition, the growth in gas demand is sensitive to changes in the price of gas. High and volatile gas prices typically inhibit demand growth. Gas prices in recent periods have been highly volatile and, for extended periods, in excess of the equivalent price of fuel oil.

Finally, KeySpan is a 50% partner in the Islander East project. Given its role in ownership of the project, it is not clear the extent to which its obligations to market the gas from the project are binding (as they would be if the arrangement was negotiated with an independent third-party) and, therefore, reflective of actual demand in KeySpan's service territory.

3. Interactive Effects of Gas LDC and Power Plant Demand and Power Plant Displacement.

As noted previously, gas demand from the power sector typically is greater in the summer because the electric system in the New York City metropolitan area experiences its peak usage during the summer driven by air conditioning loads. Gas LDC demand in the U.S. Northeast, by contrast, typically peaks in the winter (because of its heavy use for heating). In addition, new gas-fired electric generation is much more efficient in utilizing gas to generate electricity and, to the extent it displaces older gas-fired electric generation, may actually decrease gas used for electric generation.

Islander East's market demand analysis assumed that the separate demands for electric power and by the gas LDCs are additive, when, in fact, they exhibit substantial seasonal diversity. In addition, it does not appear that the market analysis considered appropriately the effects on gas use of the improved efficiency of new power plants. As a result, Islander East's projected need for the Project substantially overstates the incremental contribution to gas demand resulting from electric power needs.

CRA in its July, 2002 report to NYISO and NYSERDA described these phenomena as follows:

Gas fired, combined-cycle (CC) plants account for almost 90 percent of the new electric generating capacity proposed for New York. These CC units are substantially more efficient than existing gas-fired steam units. For each British thermal unit (Btu) of gas, a new CC unit can produce about 50 percent more

¹⁰ DRI*WEFA, Natural Gas Consumption Outlook for New York City Metropolitan Areas and Long Island (2002).

electricity than a steam unit. Hence, the presence of these units will increase gas demands only if generation from existing units burning other fuels or imports from other regions are displaced; if generation from less efficient gas-fired units is displaced, gas demands will *decrease*, ceteris paribus. New units are most likely to displace non-gas-fired generation during winter periods when gas delivery capacity has been unavailable to generators and steam units have opted to burn residual oil. In the summer, when more gas has been used for generation historically, new gas-fired units are more likely to replace generation from less-efficient, existing gas-fired units.

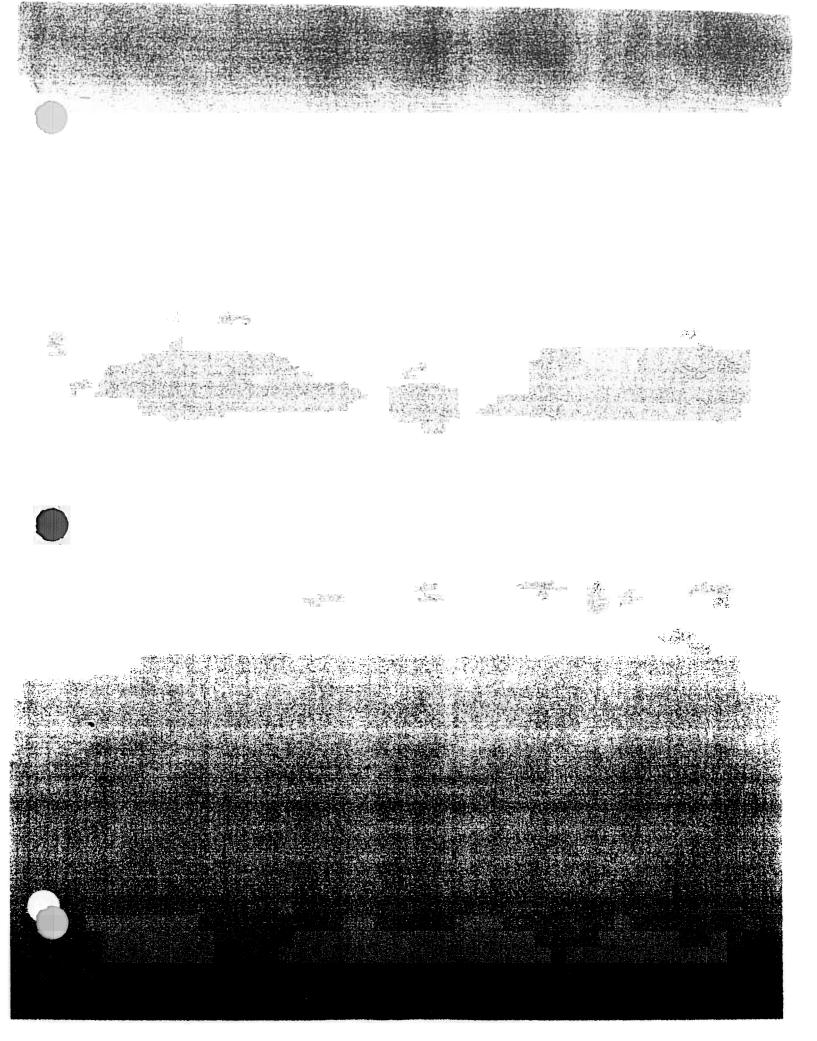
CERA Report at 2.

CRA, in the CRA Report, conducted a detailed modeling of gas demand and likely electric generation expansion scenarios for New York State and, separately for downstate, in order to forecast the adequacy of the gas infrastructure system to serve both non-electric gas demand and gas-fired electric generation. CERA concluded as follows:

With the addition of 465 MDT per day of pipeline capacity assumed to be in place by November, 2003 [which does not include the Islander East volumes], New York will have sufficient gas delivery capacity to supply the amounts of gas required to generate under all 2005 generation and post-2003 pipeline addition [anywhere from 0 to 800 MDT/day incremental additions] scenarios provided the existing ability to burn oil is retained. CERA Report at 5.

	Table II – Incremental	Pipeline Projects serv	ing metropolitan NYC	,11		
Project	Length	Maximum Beginning - FERC order				
•		Delivery Volume	Terminus	approving project		
MarketLink Phase		115,000 DTH/day	Extension of the	FERC approval		
I and II		(Phase I to NY)	Transco Leidy	1		
		130,000 DTH/day	Line from Leidy,	-		
		(Phase II to PA	PA to NYC			
		and NJ)		1.000		
Hanover		135,000 DTH/day	Increased	FERC approval		
Compressor			compression at			
			AGT compressor			
			station in Hanover,	-		
			NJ			
Leidy East		130,000 DTH/day	Looping and added	FERC approval		
Zoley Zaov			compression on			
			Transco's Leidy			
			Line in PA and NJ			
Millenium	442 miles	700,000 DTH/day;	Lake Erie/Mount	FERC approval:		
		350,000 DTH/day	Vernon, New York	PD Dec., 2001;		
		(deliverability into		CEPCN, Sept.,		
		NYC area)		2002		
	}					
East Chester		230,000 DTH/day	Northport, LI to	FERC approval		
	·		the Bronx, NY			
Texas Eastern		100,000 DTH/day	Expansion in			
Incremental			TETCO system for			
Market Expansion			delivery to NJ			
•			Natural Gas			
	,		Company			
Iroquois		85,000 DTH/day	Delivery to			
Brookfield	·	,	marketing and			
			power companies			
			in NYC			
ConneXion Project		500,000 DTH/day	Expansion in			
			storage and			
	· ·		delivery to NYC			
			on Tennessee			
			Pipeline			
Blue Atlantic	750 miles,	1,000,000	El Paso project			
	undersea	DTH/day	running from Nova			
			Scotia to NYC			
			area			

Source: New York State Planning Board, 2002 State Energy Plan and Final Environmental Impact Statement (June, 2002), section 3.5.



Greenspan Sees Higher Natural Gas Prices

By H. JOSEF HEBERT Associated Press Writer

WASHINGTON (AP) — Federal Reserve chairman Alan Greenspan predicted tight supplies of natural gas and high prices for a prolonged period Tuesday, largely because - unlike oil - the U.S. market is unable to draw on world gas supplies easily.

"We are not apt to return to earlier periods of relative abundance and low prices anytime soon," Greenspan said in testimony at a congressional hearing. He noted that the markets are anticipating natural gas prices of more than \$6 a thousand cubic feet well into next year.

Market expectations "imply a 25 percent probability" that the peak price natural gas on the wholesale market exceed \$7.5 per thousand cubic feet by next January, in the middle of the winter heating season, Greenspan said.

Greenspan said that already the increase in gas prices - more than double what they were last year - "have put significant segments of the North American gas-using industry in a weakened competitive position" against industries overseas.

"Unless this competitive weakness is addressed, new investment in these technologies will flag," Greenspan said in his appearance before the House Energy and Commerce Committee.

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Greenspan did not specifically address whether these problems, affecting especially the chemical, fertilizer, steel and aluminum industries, might hinder economic recovery.

Earlier, the Energy Department said that extremely short supplies of natural gas in storage will result in high prices to continue through this year and into 2004. Gas stocks in storage were 38 percent below what they were last year and 28 percent lower than the five-year average.

"An abnormally hot summer, followed by a cold winter could push natural gas deliverability to the limit and cause record high prices," Guy Caruso, head of the government's Energy Information Administration, told a congressional hearing.

Greenspan said the supply and price problems stem from "a modest gap" between growing demand for the environmentally friendly fuel and supplies that are limited. "Rising demand for natural gas, especially as a clean-burning source of electric power, is pressing against a supply essentially restricted to North American production," said Greenspan.

"If the train wreck occurs and natural gas prices skyrocket and shortages occur, who will be at fault?" Rep. Billy Tauzin, R-La., the committee's chairman, had asked earlier. "We see a storm brewing on the horizon. We need to prepare for it."

But a panel of industry officials provided little insight on what might be done to increase supplies dramatically in the hort term, or head off higher prices this summer and winter.

Richard Sharples, a vice president of Anadarko Petroleum Corp., said a chronic gap between supply and demand needs to be addressed by removing regulatory barriers to exploration and development, and providing industry with

That won't help consumers this year in Ohio where Donald Mason, head of the state Public Utilities Commission, predicted that the average residential heating bill next winter will be \$220 higher per household than it was last winter. He said he's trying to find a way to "prepare (people) for the sticker shock."

It's already impacted us," Greg Lebedev, president of the American Chemistry Council said in an interview. "And with le domino effect when you have an industry our size, it will by definition have a cascading effect on the entire economy."

Robert Liuzzi, president of CF Industries Inc., speaking on behalf of the fertilizer industry, said high fuel prices already have forced one-fifth of the industry production capacity to shut down. "This situation threatens to destroy an efficient U.S. industry and displace thousands of workers," he said in remarks prepared for the hearing.

The Bush administration also is worried.

Energy Secretary Spencer Abraham has asked the National Petroleum Council to provide a game plan before the end of this month on how to deal with "the looming challenges we face" because of the short-term natural gas supply crunch.

This spring, natural gas in storage dropped to 623 billion cubic feet, the lowest it has been since the government began keeping records in 1976. Stocks have increased somewhat, but remain 38 percent below last year, and 28 percent below the five-year average, according to the department's Energy Information Administration.

By next fall, the government would like to see about 3.5 trillion cubic feet of gas in storage to be ready for the winter heating season, or about three times the amount available now. The average natural-gas fueled home uses about 80 thousand cubic feet a year, according to the American Gas Association.

"The natural gas industry is at a critical crossroads," says Carl English, president of Consumers Energy in Jackson, Mich. He said while the federal government encourages increased use of natural gas to improve air quality and other reasons, it also makes it difficult to get it to meet the increased demand.

group of 29 Democratic senators recently wrote Abraham urging him to take steps to promote increased onservation to try to curtail gas demand this summer. Abraham agreed to push for conservation measures.

There will be enough gas to go around, but "we're trying to prepare customers for higher prices this winter regardless of the weather," says Peggy Laramie, a spokeswoman for the American Gas Association. The group represents 191 utilities that deliver natural gas to more than 53 million homes.

The spot price on Monday for natural gas was \$6.25 per 1,000 cubic feet at the Henry Hub transit center in Louisiana. The average price was about \$3 per 1,000 cubic feet last year, and \$2.46 per 1,000 cubic feet from 1996-2000, according to the Energy Department.

Despite the high prices, there is little sign that the amount of gas being developed will increase significantly this year with the government expecting an overall 2 percent decline in production compared with last year. The number of drilling rigs has increased about 22 percent from a year ago, but remains below the number in operation in 2001 when surging prices caught the industry's attention.

On the Net:

Energy Department forecast: http://www.eia.doe.gov

American Gas Association: http://www.aga.org/

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